



Re: reg7 radium site Fw: Rad monitoring and cleanup in the News 

Brad Jackson to: Jon Richards

03/22/2010 09:39 AM

From: Brad Jackson/R4/USEPA/US
To: Jon Richards/R4/USEPA/US@EPA

Yes, I think I've seen this before.

Brad

-----Jon Richards/R4/USEPA/US wrote: -----

To: Brad Jackson/R4/USEPA/US@EPA
From: Jon Richards/R4/USEPA/US
Date: 03/22/2010 09:34AM
Subject: Re: reg7 radium site Fw: Rad monitoring and cleanup in the News

Missouri Radiation Cleanup Plan 18 Times Weaker Than EPA Precedent

A Bush-era cleanup plan for a radioactive St. Louis area landfill that state and local government officials are urging the Obama administration to reverse is at least 18 times less stringent than those EPA has implemented in the past at similar urban Superfund sites around the United States, an *Inside EPA* analysis of government documents associated with the sites shows.

Critics warn that the Bush-era cleanup plan, if adopted by the Obama EPA, would set a dangerous precedent not only in terms of permitting radioactive waste to remain at urban Superfund sites at levels above what EPA has traditionally allowed, but also that it could set a precedent allowing such wastes to be disposed at conventional urban landfills not regulated by the Nuclear Regulatory Commission (NRC).

The St. Louis area site at issue, the West Lake Landfill in Bridgeton, MO, is a Superfund site located in the floodplain of the Missouri river where nuclear waste was illegally dumped during the Cold War. State and local government officials have been pressuring the Obama EPA to reverse the controversial Bush-era cleanup plan for the site that environmentalists fear could set a national precedent allowing for the disposal of nuclear waste in conventional urban landfills at levels beyond what the agency's standards typically allow.

EPA's traditional Superfund cleanup standard -- called an applicable or relevant and appropriate requirement (ARAR) -- for sites contaminated with radium-226 dictates that such sites should be cleaned up to the extent that concentrations of radium-226 do not exceed 5 picocuries per gram (pCi/g) of soil above what naturally occurs in the area.

A [1988 report by the NRC](#) indicates that the average radium-226 concentration at the West Lake site is about 90 pCi/g, 18 times above the 5 pCi/g ARAR. In addition, the NRC report says radium-226 activity will increase over time, increasing nine-fold over

the next 200 years, or 162 times above the ARAR. "This increase in Ra-226 must be considered in evaluating the long-term hazard posed by this radioactive material," the NRC report says.

And, according to a 1982 NRC report, some samples taken at the West Lake site indicate radium-226 concentrations as high as 21,000 pCi/g, or 4,200 times above the ARAR.

But under [a record of decision \(ROD\)](#) the Bush EPA approved in May 2008, the agency's selected approach to dealing with the site -- located less than a mile from a residential development and about two miles from the Missouri River -- is to leave the radioactive waste in place and construct a "cover of rocks, construction rubble, and clay [with] no liner below to protect the wastes from ground water leaching," according to a resolution the St. Louis City Board of Alderman recently approved urging EPA to change course.

Similar Request

The resolution, which mirrors a similar request St. Louis County officials approved last year, raises concerns that "residents in St. Louis County north of I-70 and most of St. Louis City residents drink water from the Missouri River, downstream from West Lake," and that the Bush-era plan could cause that water to become contaminated.

The local officials, along with the Missouri Department of Natural Resources and local environmental groups, are urging the Obama EPA to have the waste removed by the Army Corps of Engineers' Formerly Utilized Sites Remedial Action Program, which is already involved in excavating other nuclear waste sites in the St. Louis area.

Mathy Stanislaus, the Obama EPA's assistant administrator for solid waste and emergency response, is reviewing the critics' concerns, according to an EPA spokeswoman.

EPA has previously removed radioactive contamination from urban Superfund sites with radium-226 concentrations comparable to those NRC has found at West Lake. In 2000, EPA elected to redo the cleanup of the Shattuck Superfund site in Denver, a former mining and processing facility within three blocks of a residential area and which exhibited an average radium-226 concentration of 90 pCi/g -- identical to the average concentration at West Lake.

EPA in the 1990s followed through on a previous controversial decision to leave the radioactive contamination at Shattuck in place and cap the site by constructing a monolith out of concrete, fly ash and other materials. But less than five years after construction of the cap was complete, EPA admitted this remedial approach had failed.

At a cost of an additional \$20 million, EPA in 2000 removed the Shattuck monolith and cleaned up the radioactive wastes in accordance with the 5 pCi/g ARAR and disposed of them at an NRC-licensed facility for nuclear waste, the amended ROD for the site

shows. The Shattuck incident also led to a new EPA policy under which staff at its regional offices must now consult with officials at agency headquarters when deciding how to deal with Superfund sites where there is potential for setting a national precedent regarding radioactive materials.

Should the Obama EPA move forward with the Bush-era plan for West Lake, it would likely amount to a repeat of the Shattuck incident, Missouri activists have warned in letters to the agency.

In addition, sources with environmental groups outside the Missouri area say the execution of the Bush-era cleanup plan for West Lake would set a precedent not only in terms of permitting radioactive waste to remain at urban Superfund sites at levels above what EPA has traditionally allowed, but that it could also set a precedent allowing such wastes to be disposed at conventional urban landfills not regulated by NRC. Environmentalists have fought against ultimately unsuccessful policy proposals by federal agencies to relax radiation disposal standards in recent years, and moving forward with the Bush-era cleanup plan would have the same affect as approving those proposals, one activist says.

In the past, EPA has applied the 5 pCi/g ARAR for radium-226 when cleaning up similar urban landfills under Superfund. One example is the Kerr-McGee Superfund site in West Chicago, IL, a landfill turned public park located less than a mile from residential areas that EPA decided to clean up to the 5 pCi/g ARAR in 2002. Radium levels at the site were comparable to those at West Lake prior to cleanup and included a median radium concentration of 286 pCi/g and a maximum radium concentration above 15,000 pCi/g, according to the 2002 ROD. -- *Douglas P. Guarino*

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Brad Jackson---03/22/2010 09:33:39 AM---Out of the office and can't access InsideEPA. Can you copy and past it to the email. Otherwise I'll

From: Brad Jackson/R4/USEPA/US
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-----Jon Richards/R4/USEPA/US wrote: -----

To: Brad Jackson/R4/USEPA/US@EPA
From: Jon Richards/R4/USEPA/US
Date: 03/22/2010 09:05AM
Subject: reg7 radium site Fw: Rad monitoring and cleanup in the News

have you heard of this one? or from previous Rad SF mtgs? can't recall
interesting

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FYI

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